s18quiz: EXP LOG (QUIZ v259)
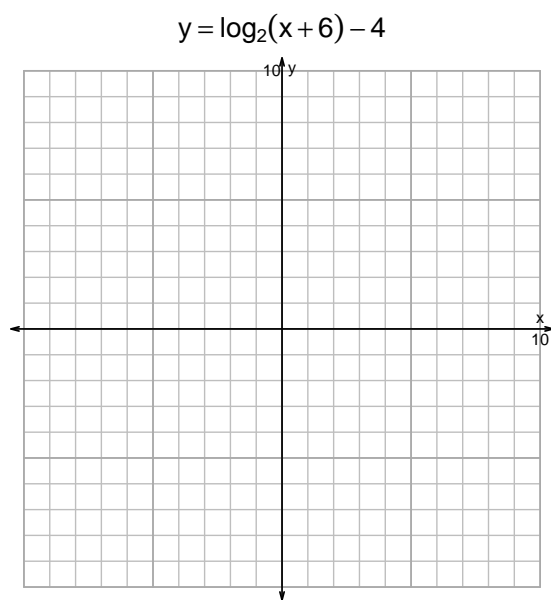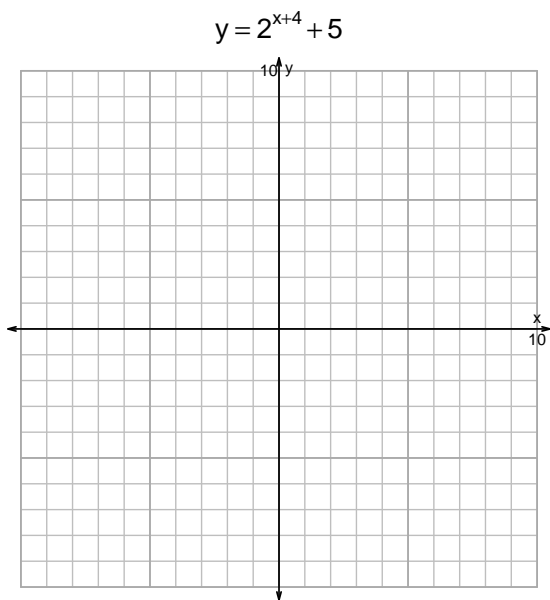
1. Graph $y = 2^{x+4} + 5$ and $y = \log_2(x+6) - 4$ on the grids below. Also, draw any asymptotes with dotted lines.

$$y = 2^{x+4} + 5$$

$$y = \log_2(x+6) - 4$$

2. Write (but do not evaluate) the solution to the equation below by writing a logarithmic expression.

$$-19 = \left(\frac{-3}{7} \right) \cdot 2^{5t/4}$$

3. An exponential function $f(x) = 5.27 \cdot e^{-1.35x}$ is graphed below on a semi-log plot.

a. Using the plot above, evaluate $f(-2.7)$.

b. Express $f^{-1}(x)$, the inverse of f.

c. Using the plot above, evaluate $f^{-1}(0.8)$.